

## ADAPTIVE COMPRESSION IN AN EDGE ROUTER

## ABSTRACT OF THE DISCLOSURE

Compression efficiency is optimized by filtering protocol-specific header and control information of a protocol data unit (PDU) to determine compressibility of the contents of the protocol data unit. Based on the result of the filtering, the state of data link compression is selected for the protocol data unit in a manner optimizing compression efficiency. A filter performing the filtering may access a table having entries with specific media types deemed compression limited and associate individual PDUs to a specific media type. When associating the individual PDUs, the filter typically determines if a given PDU is associated with a previously filtered PDU and, if so, assigns the same state of data link compression for the given PDU as for the previously filtered PDU. The data link compression is disabled if the filter determines the compressibility of the contents of the PDU is determined to be low.